



Safe Drinking Water

While traveling in the backcountry, river running, or hiking, you will utilize water from the Colorado River, side streams, seeps and springs, or other sources. Any water from these sources has the potential to cause illness if it is not properly and carefully filtered and treated.

Water Disinfection Procedures

All drinking water **MUST** be:

SETTLED to remove suspended solids. It should be clear, not cloudy.

FILTERED through an “Absolute” 1- micron filter, or one labeled as meeting American National Standards Institute (ANSI/NSF) (formerly the National Sanitation Foundation) International Standard #53 for “Cyst Removal,” and

DISINFECTED using two drops of household bleach per gallon of water, or disinfected using five drops of tincture of iodine per gallon of water. After disinfection, allow the water to sit for 30 minutes to give the chemical time to kill any organisms.

NOTE: If you use a water filter, you **MUST** also use bleach or iodine, since filtering by itself will **NOT** kill all disease- causing microorganisms.

OR

BOILED for one minute, plus one additional minute for every 1,000 feet above sea level.

All filtered and disinfected or boiled water must be stored in clean and sanitized containers.

Consequences

All of us have personal preferences and beliefs that may affect personal decisions. If you are on a commercial river trip or hike, the guides are legally required to follow the correct drinking water disinfection procedures. If you are on a private river trip or hike, Grand Canyon National Park

strongly encourages you to follow these same procedures. While some waterborne illnesses may be mild, all of our individual reactions and responses to disease agents vary, and all disease agents can cause severe or life threatening illness in some people.

Contacts

If you have questions regarding drinking water, or if you have become ill while traveling in the Grand Canyon backcountry, please contact:

Jim Nothnagel, Park Sanitarian
(928) 226- 0168

or

Mike McGinnis, River Subdistrict Ranger
(928) 638- 7832